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Technology Center 2600 Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Inder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 09/846,061 TRANSMITTAL Filing Date 04/30/2001 First Named Inventor **FORM** Victor Demjanenko Art Unit 2637 **Examiner Name** Lugo, David B. (to be used for all correspondence after initial filing) Attorney Docket Number Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC  $|\checkmark|$ Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Identify Terminal Disclaimer Extension of Time Request below): Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement Landscape Table on CD Certified Copy of Priority Remarks Document(s) Reply to Missing Parts/ Incomplete Application

Reply to Missing Parts under 37 CFR 1.52 or 1.53

VoCAL Technologies, Ltd.

Victor Demjanenko

Firm Name

Signature

Printed name

Date	September 28, 2004	Reg. No.		
	CERTIFICATE	OF TRANSMISSION/MAI	LING	
I hereby cer sufficient po the date sho	rtify that this correspondence is being facsimile transtage as first class mail in an envelope addresse own below:	ansmitted to the USPTO or deposited to: Commissioner for Patents, P	ited with the Ur P.O. Box 1450,	nited States Postal Service with Alexandria, VA 22313-1450 on
Signature	anta a	aguila.		
Typed or pr	rinted name Victor Demjanenko	U	Date	September 28, 2004

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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# Technology Center 2600

Applicant:

Victor Demjanenko, et al

Title:

Use of Turbo-Like Codes for QAM Modulation Using Independent I and Q Decoding Techniques and Applications to xDSL Systems

Application No.:

09/846,061

Filling Date:

04/30/2001

Examiner:

Lugo, David B.

Art Unit:

2637

### RESPONSE TO RESTRICTION REQUIREMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

Applicants hereby reply to the office action mailed on September 23, 2004.

· Serial No 10/290,662

#### **RESPONSE**

- 1. The 23 September 2004 official action addressed claims 1 to 9. Restriction to either Claims 1-7 or Claims 8 and 9 was requested. Claims 1 and 7 are independent. Claims 2-6 are dependent on Claim 1. Claims 8 and 9 are dependent on Claim 7. We will assume the restriction was intended to be for either Claims 1-6 (purportedly Invention I) or Claims 7-9 (purportedly Invention II).
- 2. Invention I and II are related and would not have separate utility. A QAM DSL system is comprised of a transmitter and a receiver. Forward error correction features must be equally supported in both the transmitter and receiver. Not only is it ineffective to forward error correct a data stream being transmitted to a receiver which is lacking the implementation of a matching forward error correction procedure, but it can be nearly impossible to recover the intended data stream. More extreme disastrous effects arise when a receiver expecting forward error correction is used with a transmitter lacking this feature. Subclass 265 is for a "Trellis Encoder or Trellis Decoder" and is under the more general Subclass 261 for "Quadrature Amplitude Modulation" which itself is under the more general Subclass 259 "Systems using Alternating or Pulsating Current". Inventions I and II are part of a system and should be considered under Subclass 261.

3. In the event of failure to convince the patent examiner of this argument, the applicant would elect a restriction to Invention I by canceling Claims 7, 8 and 9 without prejudice and under protest.

- Serial No 10/290,662
  - 4. Inventorship related to Inventions I and II is identical.

The examiner is invited to contact the undersigned to resolve any remaining issues.

Respectfully submitted,

9/28/2004

Date

Victor Demjanenko, Ph.D.

VOCAL Technologies, Ltd.

200 John James Audubon Pkwy.

Buffalo, NY 14228

Telephone: 716-688-4675

Facsimile: 716-639-0713